- 26. An apparatus for delivering microorganisms to an environment to be treated according to claim 17, wherein the bioreactor comprises a cell density sensor for measuring the concentration of microorganisms in the bioreactor.
- 29. An apparatus for delivering microorganisms to an environment to be treated according to claim 17, further comprising an overflow tube.

### **REMARKS**

In response to the Examiner's objection to a portion of the specification, Applicants have amended "simethylcone" in the specification for greater clarity, adopting the Examiner's suggestion. No new matter has been added.

Applicants note the Examiner's rejection of Claim 16 based on obviousness type double patenting, in view of prior U.S. Patent 6,402,941 to Lucido, et. al. Without further comment as to the propriety of said rejection, and to advance prosecution, Applicants are contemporaneously filing a divisional application directed to the subject matter of claim 16. The divisional application is accompanied by a preliminary amendment presenting said claim and a proposed terminal disclaimer for the Examiner's review and approval. Hence, and in view of the Applicants' filing of the divisional application, Applicants have canceled claim 16, without prejudice, and has amended claim 17 to incorporate all elements of the base claim, while adjusting the dependence of subsequent claims accordingly. No new matter has been added.

As the Examiner has allowed Claims 1-15 and objected to claims 17-29 because these claims are dependent on a rejected base claim (and would be allowable if presented in

independent form) Applicants submit that all claims presently pending in the application are allowable.

# **CONCLUSION**

In view of the foregoing, favorable action on the merits, and allowance of all claims, respectfully is solicited.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage, as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 28, 2003

(Date of Deposit)

Charles T. J. Weigell, Esq.

Name of applicant, assignee, or

Registered Representative

Signature 7/28/03

Date of Signature

## **EXHIBIT 1**

# "MARKED UP" PARAGRAPH PURSUANT TO RULE 1.121(a)

[0042] A composition containing organic and inorganic nutrients may be in either a liquid or solid (e.g., powdered) matter state. If a liquid, the formula may have a pre-determined concentration, the preferred concentration is on the order of 100 times. An embodiment of a composition containing organic and inorganic nutrients that is used as part of a starter material generally includes a metal-oleate, preferably K-oleate, and one or more of magnesium sulfate, calcium chloride, potassium phosphate, sodium phosphate, sodium EDTA, sodium hydroxide, ferric NH citrate, potassium bicarbonate, sodium chloride, dextrose, citrate, yeast extract, whey extract, ketrol, ammonium nitrate, ammonium chloride, glycerin, Tween 20, Tween 80, corn oil, Simethicone [Simethylcone], and trace elements that include but are not limited to copper sulfate, cobalt(II) chloride, Sodium EDTA, molybolic acid, MnCl<sub>2</sub>-7H<sub>2</sub>O, and zinc sulfate.

[0043] Preferably, the composition containing organic and inorganic nutrients includes about 50 to about 60 weight % of water, about 20 to about 30 weight % K-oleate, about 2 to about 3 weight % glycerin, about 3 to about 11 weight % of vegetable oil, such as about 3 to about 10 weight % of vegetable oil, and preferably about 9 to about 11 weight % of vegetable oil, and less than about 1 weight % of compounds selected from the group consisting essentially of MgSO<sub>4</sub>, CaCl<sub>2</sub>, NaHPO<sub>4</sub> – 7H<sub>2</sub>O, K<sub>2</sub>HPO<sub>4</sub>, NaCl, dextrose, citrate, yeast extract, whey extract, trace elements, Sodium EDTA, Keltrol, Ferric NHcitrate, NaOH, NH<sub>4</sub>NO<sub>3</sub>, NH<sub>4</sub>Cl, Tween 20, Tween 80, and Simethicone [Simethylcone]. Most preferably the vegetable oil is a mixture of about 4 to about 5 weight % of corn oil and about 5 to about weight 6% canola oil peanut oil.

#### **EXHIBIT 2**

# "MARKED-UP" CLAIMS PURSUANT TO RULE 1.121(c)(1)(ii)

17. An apparatus for delivering microorganisms to an environment to be treated [according to claim 16, further comprising a reservoir, said reservoir in fluid communication with the water supply and the bioreactor wherein water enters the reservoir and flows to the bioreactor when a predetermined level is reached], comprising:

a bioreactor comprising an output tube to the environment to be treated;

a nutrient container comprising a mixture of inorganic and organic nutrients;

a nutrient pumping means for pumping inorganic and organic nutrients from the nutrient container to the bioreactor, the nutrient pumping means is in fluid communication with the nutrient container and the bioreactor;

a solenoid in fluid communication with the water supply and the bioreactor, the solenoid having an open and closed position wherein water flows into the bioreactor when the solenoid is in the open position and water is prevented from entering into the bioreactor when the solenoid is in the closed position; and

a reservoir in fluid communication with the water supply and the bioreactor wherein water enters the reservoir and flows to the bioreactor when a predetermined level is reached.

18. An apparatus for delivering microorganisms to an environment to be treated according to claim [16] 17, further comprising a controller comprising a programmable memory and an actuator, said controller being in communication with the solenoid and the nutrient pumping means wherein the actuator activates the solenoid and nutrient pumping means according to a predetermined schedule stored in the programmable memory of the controller.

- 19. An apparatus for delivering microorganisms to an environment to be treated according to claim [16] 17, further comprising a heater means for heating the bioreactor.
- 22. An apparatus for delivering microorganisms to an environment to be treated according to claim [16] 17, wherein the inorganic and organic nutrients are in liquid form.
- 23. An apparatus for delivering microorganisms to an environment to be treated according to claim [16] 17, wherein the nutrient pumping means and solenoid are independent.
- 24. An apparatus for delivering microorganisms to an environment to be treated according to claim [16] 17, wherein the nutrient pumping means is a pneumatic pump.
- 25. An apparatus for delivering microorganisms to an environment to be treated according to claim [16] 17, wherein the nutrient container is a hopper containing a dry mixture of inorganic and organic nutrients and is in communication with the nutrient pumping means.
- 26. An apparatus for delivering microorganisms to an environment to be treated according to claim [16] 17, wherein the bioreactor comprises a cell density sensor for measuring the concentration of microorganisms in the bioreactor.
- 29. An apparatus for delivering microorganisms to an environment to be treated according to claim [16] 17, further comprising an overflow tube.